Desk to Defender: First Aid

1. First Aid and You

Introduction and Disclaimer

First aid is the initial medical care administered to ill/injured persons, and proficiency in its art is vital to the preservation of life and limb. Assembled within this section are instructions for the treatment of numerous injuries and illnesses one may encounter, it is not all inclusive. The following sections are meant merely to be referenced to and are in no way a substitution for medical advice or formal medical training. You are both legally and morally obligated to practice first aid only to the level at which you are qualified; failure to adhere to medical standards and qualifications may cause harm to yourself and others. To reiterate ***THIS IS NOT A MEDICAL TEXTBOOK, NOR IS THIS A SUBSTITUTION FOR ANY FORMAL TRAINING.*** Now that we've gotten that out of the way, the sources below offer formal academic training in the art and science of first aid. Time, money, and resources permitted, it is strongly advised that you receive some form of certification and training. Being knowledgeable in on the ground medical skills is a highly sought after resource.

Formal Courses and Certifications

- Red Cross First Aid Training: https://www.redcross.org/take-a-class/first-aid/first-aid-training
- American Heart Association CPR Course: https://cpr.heart.org/en/course-catalog-search
- Stop the Bleed Training: https://www.stopthebleed.org/training

Awaiting Care

As a first aid provider, your job is to help a patient until someone of a higher medical certification can take over. When providing for an injured person, it should be your top priority to ensure that that someone is already en route. If you are unable to call 911 yourself, see to it that someone with you calls 911 or goes for help. If you initiate help, you must stay with your patient until relieved by a higher level of care, to do otherwise is patient abandonment.

Remember that you are not a medical professional, stay humble, and stay within your skillset. If you do not know what to do, don't do anything or else you could harm the patient more.

2. Staying Safe

It is vital that you do what you can to keep yourself safe. If someone else has already been injured, there is a chance that the mechanism of injury is still around and capable of causing harm to you first. Before approaching an injured person, take a few seconds to ensure your own safety by doing a quick scan for hazards and bodily substances. You may be hurried by stress, anxiety, and a whole slew of emotions in the event of an injured comrade, so much so that you fail to notice the electrical wires ready to hurt you next! Until all hazards are clear from the scene, do not approach the patient (a hurt medic does nobody any good). Don't be a hero, be a professional.

Another hazard that threatens the safety of a first aid provider is bodily fluids. Bloodborne diseases such as HIV/AIDS, hepatitis, and other pathogens are spread via contact with an infected patient's blood with one's mucous membranes (eyes, mouth, nose, genitalia) or open wounds. Save yourself first, and don the appropriate personal protective equipment (PPE) to prevent yourself from contracting these diseases. Whenever interacting with someone who is injured, one should always wear non-latex gloves and eye protection to prevent contact with bodily substances. A lesser known bodily substance hazard is that blood is slippery, so watch where you step!

3. Assessment

The Primary Survey

Learning first aid is as easy as ABC… literally. The first step of first aid is to figure out what is going on with your patient. We do this through the primary assessment, which is a rapid assessment performed to determine any immediate threats to life.

Airway

- The first step in the primary assessment is to ensure that one's airway is not obstructed by the presence of blood, teeth, dirt, or any other substance.
- **Obstruction:** Check for obstruction by using the "look, listen, feel" technique by looking for the rise and fall of the chest with each breath, listen to and feel the patient's air flow through their mouth and nose to ensure air is passing through

their lungs. Do not attempt to remove obstructions if you are not equipped or qualified to do so.

(Wildcare, 2014, pp. 25-28)

- **<u>Opening the airway</u>**: There are two main ways in which one can open a patients airway, however this should only be performed if you have received first aid training! The first is the head tilt chin lift method, in which the head is tilted back and the chin is elevated to open the airway (***DO NOT ATTEMPT IN SUSPECTED NECK/SPINAL INJURIES***). In the event that you suspect an injured spinal/neck injury, perform the jaw thrust method demonstrated below.

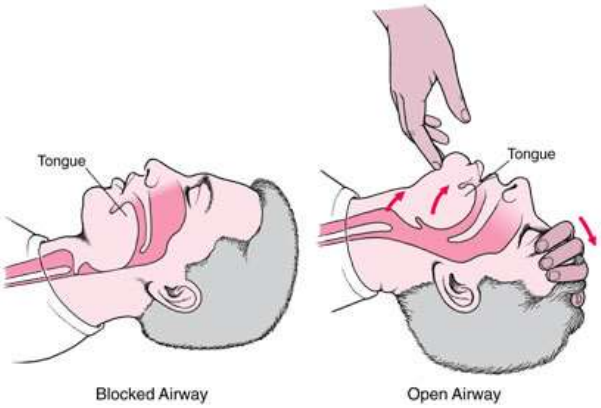


Figure 1.1: Head Tilt Chin Lift

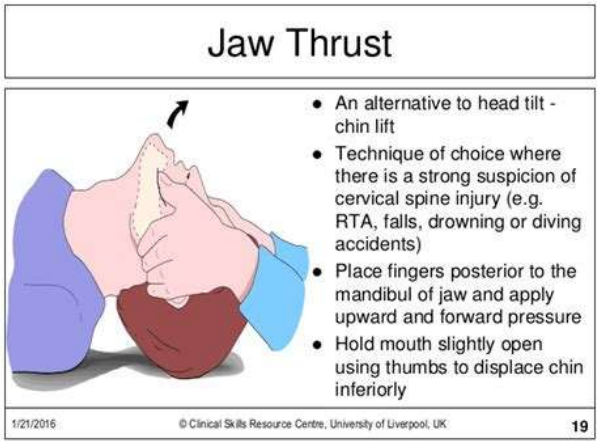

Jaw Thrust
An alternative to head tilt - chin lift
Technique of choice where there is a strong suspicion of cervical spine injury (e.g. RTA, falls, drowning or diving accidents)
Place fingers posterior to the mandibul of jaw and apply upward and forward pressure
Hold mouth slightly open using thumbs to displace chin inferiorly
1/21/2016
© Clinical Skills Resource Centre, University of Liverpool, UK
19

Fig. 1.2: Jaw Thrust

B<u>reathing</u>

- Are they?
- Is their breathing fast, slow, or noisy?
- Is their breathing rhythmic or abnormal?

C<u>irculation</u>

- Assess for pulse by using your forefinger and index finger and placing it on the patient's neck and/or wrist (see image below).
- Is their heart rate slow, fast, abnormal, or absent altogether?
- Are they bleeding?

(Wildcare, 2014, pp. 25-28)

PULSE SITES

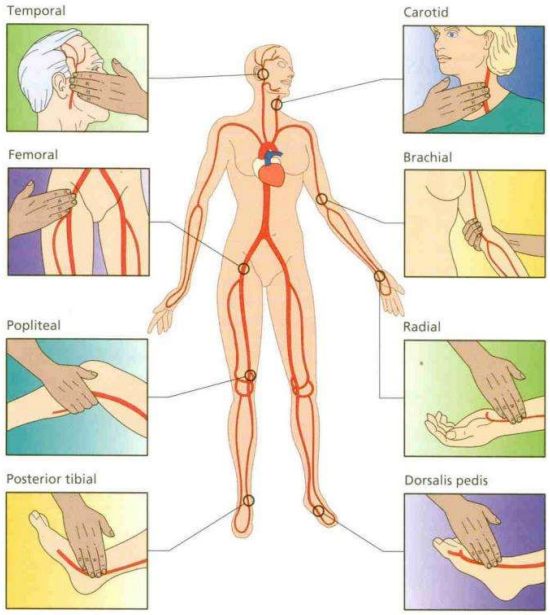


Figure 1.3: Pulse Palpation Zones

The Secondary Survey

The secondary survey is the assessment completed after it is found there are either no issues found in the primary or all issues were already addressed. ***If an issue is found in the primary survey, address the issue first before moving on to the next step!***

- Identify the patient's chief complaint. What's going on? Why do they need help?
- Assess relevant medical history:
    - **S**igns & Symptoms: what do they feel (symptoms) and what can you observe (signs)?
    - **A**llergies: Do they have any? Are those allergies involved with the current emergency?
    - **M**edications: Do they take any medications?
    - **P**ast medical history: Do they have any medical conditions?
    - **L**ast oral intake: What did they last have to eat/drink?
    - **E**vent history: What occurred leading up to the incident?
- Perform a head to toe assessment to search for injuries

(Wildcare, 2014, pp. 32-40)

4. Suspected Spinal Cord Injuries

Suspecting a Spinal Cord Injury

Unless you're superman, chances are you won't have readily available access to the use of X-ray vision, meaning that you're unqualified to diagnose a spinal cord injury. You can however take the necessary precautions in the event that someone may have a spinal cord injury (SCI). Spinal cord injuries occur from what is called a "positive MOI" (mechanism of injury), which can be the result of any of the following incidents:

- High Speed motor vehicle collisions
- Falls Greater than 3x patient height
- Axial Loading
- Violent situations near the spine
- Sports injuries
  (New York State Department of Health Bureau of Emergency Medical Services, n.d.)

If your patient meets *any* of the above criteria, you should suspect a spinal cord injury whether or not they display the symptoms of an SCI.

Signs and Symptoms:

- Pain
- Tenderness
- Painful Movement
- Deformity
- Soft Tissue Injury in area of spine (Bruise, Laceration, etc.)

(New York State Department of Health Bureau of Emergency Medical Services, n.d.)

Treating an SCI

Unless you are an EMT or higher in the medical field, you are probably not qualified to address this injury. Your priority should be to call 911, and to immobilize the patient by keeping them still and their spine in a neutral position.

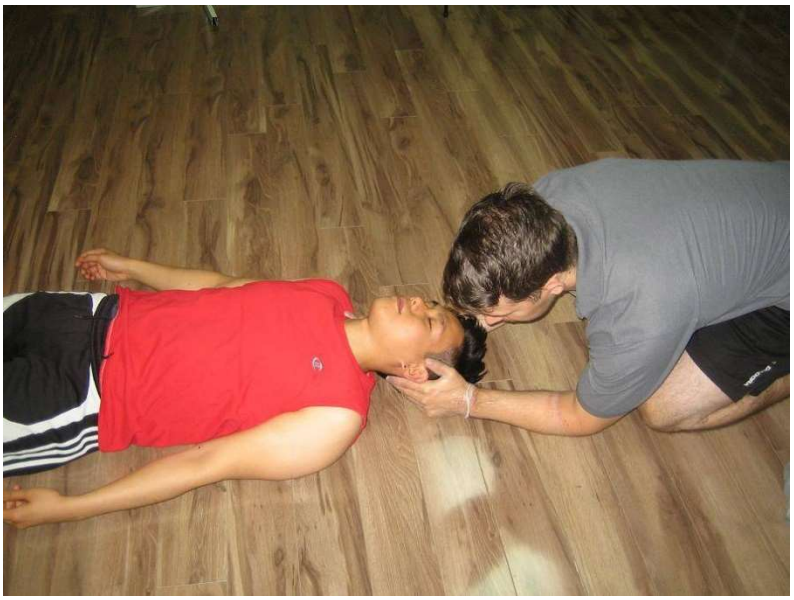


Fig. 1.4: Immobilizing the cervical spine

5. Weather Related Injuries

Heat Cramps/Dehydration

Heat cramps and dehydration are heat related injuries caused by a decrease in bodily fluid and electrolyte concentration. The symptoms are as follows:

Dehydration s/s:

- Headache
- Mild nausea
- Dark urine
- Thirst

Heat Cramps s/s:

- Muscle pain and cramping in the legs, usually occurring after harsh exertion

Treatment:

1. Remove patient from the elements; bring them indoors or into shade
2. Rehydrate the patient with water and a drink containing electrolytes

a. A quick rehydration drink can be made by combining 1L water with 1 tsp. of salt and 8 tsp. sugar

(Wildcare, 2014, p. 228)

Heat Exhaustion

Heat exhaustion is a heat related illness brought on by excessive exposure to hot environments combined with physical exertion. During this condition, excessive water and electrolytes are lost leading to symptoms of exhaustion. While heat exhaustion is not a life-threatening emergency, it can easily develop into heat stroke if untreated.

S/S:

- Fatigue
- Thirst
- Dizziness
- Increased heart rate
- Increased respiratory rates
- Pale, clammy skin
- Muscle cramps
- Nausea
- Minor variations in consciousness

Treatment:

1. Remove the patient from the heat, take them indoors or into the shade
2. Remove any excess clothing (mind a patient's privacy)
3. Apply cool, damp cloths to the body
    a. Apply to the forehead and armpits especially, as the blood vessels are near to the skin in these areas
4. Rehydrate the patient (see *Heatcramps/Dehydration* for rehydration steps)

(Wildcare, 2014, p. 229)

Heat Stroke

Heat stroke is a heat related injury in which the body's electrolytes and fluids are so depleted that it is no longer able to compensate to heat. In this **medical emergency** the body's core temperature is elevated potentially leading to death or serious injury if left untreated.

S/S:

- The skin is warm and red
- The patient has ceased to sweat, as they no longer are able to compensate
- Confusion, disorientation, aggression, and potentially even hallucination

- Seizures are possible at this stage in heat exposure
- Patient is no longer urinating
- Increased heart rate
- Increased respiratory rate

(Wildcare, 2014, p. 230-231)

Treatment

1. Immediately call 911 and remove the patient from the heat
2. Remove any excess clothing (mind a patient's privacy)
3. Apply cool, damp cloths to the body
4. Apply to the forehead and armpits especially, as the blood vessels are near to the skin in these areas
5. Rehydrate the patient (see Heatcramps/Dehydration for rehydration steps)

(Curtis, 2005, p. 347)

Hypothermia

Hypothermia is a decrease in the core body temperature which leads to impairment. Below are the stages of hypothermia:

TABLE 1. Stages of Hypothermia*

Core Temperature °C (°F)	Stage	Possible Signs
32–35 (90–95)	Mild	Shivering, pallor, acrocyanosis
		Increasing clumsiness, slurred speech
28–32 (82–90)	Moderate	Compensatory signs disappear
		Confusion
25–28 (77–82)	Severe	Flushing, muscle rigidity, edema
		Stupor
<25 (<77)	Profound	Clinical appearance of death
		Coma

*Signs may vary in onset; temperature thresholds are arbitrary.

Fig. 1.5: The Stages of Hypothermia

Treatment of Mild to Moderate:

1. Remove patient from the cold
2. Remove any wet articles of clothing and replace them with warm clothes
3. Wrap the patient up in warm blankets
4. If the patient can swallow, offer them warm, sugary liquids such as heated Gatorade, hot chocolate, or Jell-O in warm water

Treatment of Severe Hypothermia:

1. Call 911!
2. Follow the above steps.

(Wildcare, 2014, p. 239)

6. Trauma

Gunshots

There is little doubt that you need be reminded the severity of a gunshot wound (GSW), so we'll not belabor you. The summary is that they are very, very not good and require a skilled practitioner for the best possible outcome. It's important to know that you are *not* that practitioner, you are simply doing everything you're qualified to do to prevent further harm.

1. First and foremost, ensure that the scene is safe. This is incredibly important! You are not John Wick, and cannot dodge bullets. A brash attempt to run into a spray of bullets will only make things worse. Be sure that the firing has ceased and the threat has cleared before you attempt to get involved.
2. Call 911. Do it.
3. Stop the bleed!
    a. If the wound is in an extremity, place a tourniquet (see the graphic)
    b. Use gauze, towels, clothing, etc. and place direct pressure over the wound to slow and/or stop the bleeding *(Brouhard, 2019)*
    c. Apply a chest seal over sucking chest wounds to prevent lung collapse. A sucking chest wound is caused by a penetrating injury to the chest wall; these injuries can be identified by the sound of air rushing through the wound. These wounds must be immediately treated! If you do not have a chest seal on hand, you can easily create one with three pieces of tape and a non-permeable membrane (plastic wrap, aluminum foil, a tarp, etc.). Place the membrane over the wound and tape three sides of it to the patient's chest, making sure to leave one side of the membrane open. Doing this allows air to escape the chest cavity while preventing it from entering again *(Curtis, 2005, p. 313)*.
4. Treat the patient for shock by keeping them warm. If the wound is located below the waist, you may consider elevating their legs to enhance blood flow back to the heart (if the wound is above the waist, do not do this).

(Brouhard, 2019)

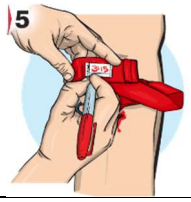
Step 1.	Remove the clothing so that the tourniquet will be directly on the skin.
Step 2.	Place the tourniquet on the skin, 2 in. (5 cm.) above the wound. Do not place on a joint!
Step 4.	Slide over the limb
Step 5.	Pull the tail tightly
Step 6.	Twist the windlass until the blood stops flowing.
Step 7.	Lock the windlass into the holder.
Step 8.	Write the time of placement. 

Fig. 1.6: Proper Tourniquet Application (The American Red Cross, 2019).

Stabbings/Punctures/Impalement

There is again no need to inform you that a stabbing is very much not helpful for our continual pursuit in not dying. In general, if an object is impaled then it should not be removed. The removal of an impaled object may cause the patient to bleed more.

1. Again, make sure the scene is clear. There is no reason for you to become a kebab.
2. Call 911! You're out of your depth here.
3. Do not remove the knife or object if it is still in the body.
4. Apply the principles of hemorrhage control outlined above in the GSW section
    a. Place pressure on the wound, if this fails then consider a tourniquet if the wound is on an extremity.
5. Treat the patient for shock by keeping them warm. If the wound is located below the waist, you may consider elevating their legs to enhance blood flow back to the heart (if the wound is above the waist, do not do this).

(DeMuro, 2020)

Musculoskeletal Injuries

	STRAINS	SPRAINS	FRACTURES	DISLOCATIONS
Mechanism of Injury	Over time or sudden, due to improper technique	Sudden, jarring, twisting	Sudden, associated with impact or force	Sudden, indirect or direct force or impact on a joint
Patient History	Often has history	May have history	Probably no history	Often has history
Signs & Symptoms	Swelling, redness, noises and pain associated with activity that caused strain	Swelling, pain, bruising discoloration, decreased/inability to bear weight, "popping sound"	Swelling, pain, bruising, point tenderness, crepitus, angulation, deformity, inability to bear weight, may be open	Deformity at joint, loss of symmetry, abnormal shape, lack of obvious angulation, loss of joint function
Treatment	HIRICES	HIRICES	HIRICES Consider reduction if severely angulated or CMS is compromised	Splint or reduce depending upon distal CSM, location, assessment skills
Prevention	Warm-up Hydrate Proper conditioning/ training	Warm-up Good boots Be smart Proper conditioning/ training	Remain within skill level	Proper conditioning and training

Fig. 1.7: MOI, History, Treatment, and Prevention of Musculoskeletal Injuries (McEvoy, Moore, & Bleicher, 2012, p. 53)

<u>Treatment</u>:

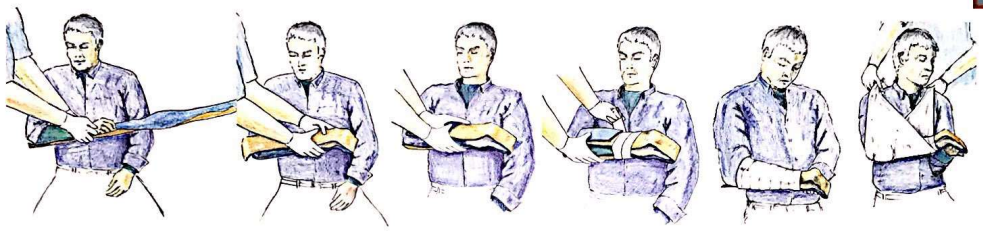
1. **H**ydration
2. **I**buprofen or another non-steroidal anti-inflammatory (NSAID) medication
3. **R**est the extremity until pain and swelling has decreased
4. **I**ce the extremity for 20-30 minutes every 2 hours
5. **C**ompress the extremity with a snugly wrapped compression bandage

6. **E**levate the limb over the heart to decrease swelling
7. **S**tabilize the injury in a splint (see below) (*McEvoy, Moore, & Bleicher, 2012, p. 53)*
8. If you are isolated from definitive care, fashion a crutch or other weight bearing device and take it slowly when evacuating.
9. **<u>Compound (Open) Fractures)</u>:**
    a. If a fracture is COMPOUND (meaning the bone penetrates through the skin) do **NOT** push it back in.
    b. Control bleeding by applying direct pressure to the wound
    c. Assess the patient's lower extremity pulses to assess for circulatory compromise. An absent or diminished pulse may suggest that the blood flow has been cut off.
    d. ***Remote Care Only***: Clean the wound by rinsing it with diluted Betadine solution (3-4 oz. of 10% Betadine solution in 1L of water). These wounds are at a high risk for infection
    e. Protect the bone from damage and drying by covering it with sterile dressings moistened with saline or a Betadine solution.
    f. Splint the limb and bandage the wound
    g. Evacuate as soon as possible.
10. Do not under any circumstances attempt to set the bone without proper medical training. Even if you are qualified, it is advised you allow this to occur within a hospital setting unless care is far away.

(Wildcare, 2014, p. 118-127)

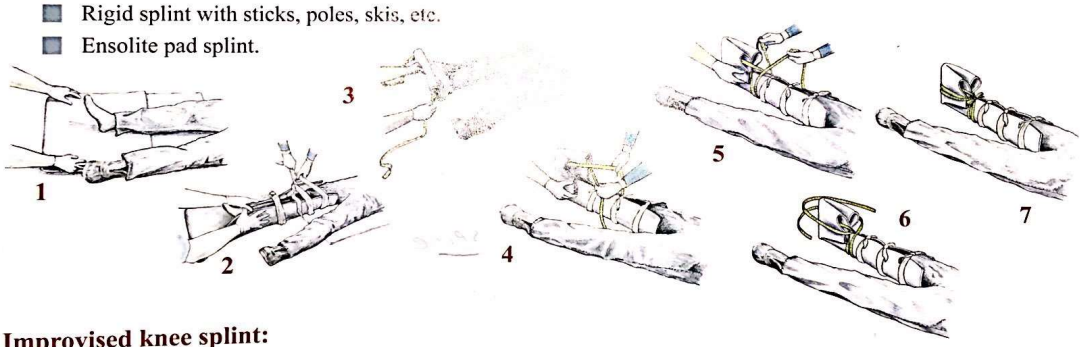
Forearm splint:

- Rigid splint with sticks, pack stays, etc. used with arm sling and swathe.
- Sam Splint used with arm sling and swathe.



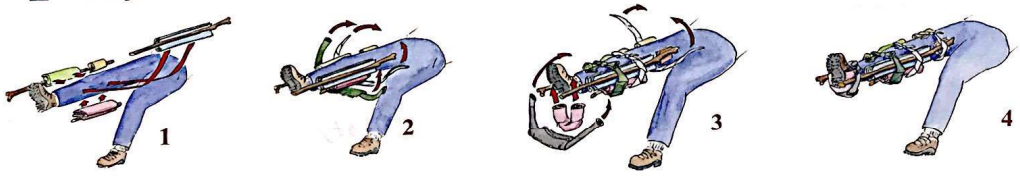
Improvised lower leg & ankle splint:

- Rigid splint with sticks, poles, skis, etc.
- Ensolite pad splint.



Improvised knee splint:

- Splint knee in position of comfort (30^0 +/-).
- Place padding in the hollow behind the knee.



Sprained ankle bandage:

- To splint a fractured ankle or support a sprained ankle.

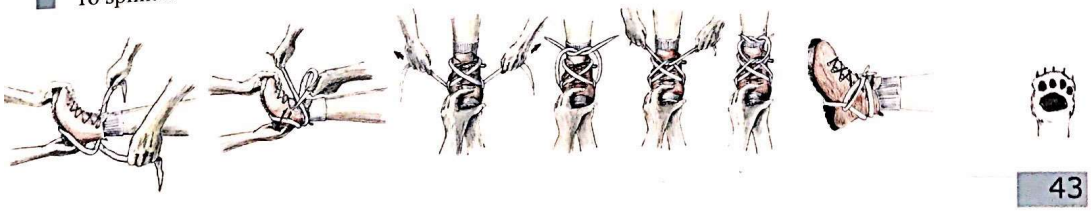


Fig. 1.8: How to Splint and Bandage Limbs (Hubbell, 2014, p. 43).

7. Eye Injuries

Foreign Bodies Lodged in the Eye

1. If the object does not naturally come out, try to flush it out with sterile saline (saline is similar in content to tears)
2. If flushing the object does not work, it is advised to see a more advanced provider

Blunt Trauma

Trauma sustained to the eye due to direct impact from anything ranging from rubber bullets, rocks, or other objects that do not belong in one's eye.

1. Call 911, the eyes are sensitive and all damage should be seen by a high-level provider
2. Assess the patient for further damage to the face
3. Apply gentle pressure (not on the eye) to stop bleeding
4. Apply a cold compress to the eye
5. Evacuate ASAP

Lacerated Eyelids

1. Call 911
2. Place a sterile dressing over the eyelid (do not apply pressure directly to the eye)
3. Cover both eyes (both eyes' movement is coordinated, cover both eyes to prevent the good eye's movement from aggravating the injured eye)

Impaled Objects in the Eye

1. Call 911
2. Unless qualified, do not remove the object from the eye.
3. If the object falls out or is removed, apply direct pressure to the wound (but not too much or you may force the contents of the eye to evacuate)
4. Protect and bandage the eye by placing a cloth "donut" around the eye, and gauze over the uninjured eye.
    a. Place a cup over the injured eye
    b. Tie the cup around the head
    c. Cover the uninjured eye too

Blowout Fracture

A blowout fracture occurs when the bones containing the eye are fractured, allowing the eye to sink into the skull.

1. Call 911
2. Cover both eyes!

(Wildcare, 2014, pp.101-103)

8. Head Injuries

Concussions

A concussion is a mild bruise to the brain caused by a blunt force impact to the skull. Suspected concussions are to be treated as emergencies, as one cannot determine the extent of the underlying damage (increased pressure, brain bleeding, and other damage can occur from concussive force).

(Curtis, 2005, p. 347)

S/S:

- Loss of consciousness
- Amnesia (loss of memory of events before the incident or after)
- Altered mental status
- Confusion
- Nausea/vomiting
- Persistent headache
- Fainting/dizziness
- Blurred vision
- Slurred speech

Treatment:

1. Call 911
2. If the patient is conscious with no suspected spinal injury, lay the patient down with their head and shoulders slightly elevated
3. If the patient is unconscious and a spinal or neck injury is suspected, do not move them and hold them in the C-spine position.
    a. Ensure their airway is open

(Saint John Ambulance Australia, 2020)

Skull Fracture

S/S:

- Depression of the skull
- Visible fracture under a laceration
- Clear, sticky fluid leaking from the nose, ears, or eyes (potentially cerebrospinal fluid aka CSF)
- Battle's Sign (bruising behind the ears)
- Raccoon Eyes (bruising around the eyes)

Treatment:

1. Call 911, this is an emergency

2. Assume a spinal injury! If you must transport the patient, do so that they are immobilized. Do not transport if you are not qualified.

(Wildcare, 2014, p. 149)

9. Protest Related Injuries

Teargas and Pepper Spray Exposure

We assume that you're no stranger to chemical irritants, a substance oft used against protestors to disperse crowds. As we saw during the summer of 2020, there is little hesitation to be had in using chemical irritants against crowds of leftist protestors. Individuals with a history of asthma, respiratory diseases, pregnant people, people with contact lenses (chemicals get trapped under them), nursing mothers, and other conditions are at a higher risk for complications related to teargas and pepper spray exposure.

Treatment:

1. Stay calm, panic will worsen the irritation. Leave the area and enter a space with fresh air and free of crowds.
2. Blow your nose, rinse your mouth, cough, and spit to rid your sensitive areas of the substance. Try not to swallow!
3. If appropriate, remove contact lenses with clean, uncontaminated gloves or fingers
4. Do not rub the eyes
5. **Eyes and Mouth Exposure:**
    a. Some activist groups have found the use of a solution containing 50% Maalox (an antacid consisting of aluminum hydroxide, magnesium hydroxide, and simethicone) and 50% water useful for flushing the eyes and mouth of chemical irritants. Do not swallow the substance, as you are only swallowing the chemical as well.
6. Remove contaminated equipment & clothing, shower in the coldest water you can tolerate
    a. Wash your clothing with strong detergents, and avoid touching your eyes, face, other people, furniture, and carpets

(Black Cross Health Collective, n.d.)

Occupy WallStreet

THIS GUIDE WAS MADE IN SOLIDARITY WITH THE OCCUPY WALLSTREET MOVEMENT AND IS NOT DIRECTLY AFFILIATED
METHOD BELOW USED BY MANY, INCLUDING PHOTOGRAPHERS IN GREECE DURING PROTESTS

DEFENDING AGAINST TEAR GAS

THE FOLLOWING TIPS ARE TO BE EXERCISED ONLY FOR DEFENSE PURPOSES AND IN THE EVENT OF POLICE/GOVERNMENT OFFICIALS USING TEAR GAS IN PEACEFUL PROTESTS. NEVER INCITE VIOLENCE.

ITEMS YOU WILL NEED

PAINTERS/DUST MASK
FOUND IN HARDWARE STORES

EYE PROTECTION
FOUND IN HARDWARE STORES

WATER SPRAY BOTTLE
MAKE SURE WASHED OF ANY CLEANING SOLUTION

LIQUID ANTACID
ANY IN LIQUID FORM SUCH AS MAALOX OR MYLANTA

HELPING YOURSELF AND OTHERS

- AFTER USING THE LIQUID ANTACID AND WATER METHOD ON YOURSELF, HOLD UP YOUR SPRAY BOTTLE AND START SHOUTING FOR PEOPLE TO COME TOWARDS YOUR VOICE FOR HELP. SPRAY THEIR FACE AND MOUTH.
- IF YOU ARE WEARING EYE PROTECTION OR A MASK, BE PROACTIVE AND KICK THE CANISTER AWAY FROM THE CROWD. IF YOU CAN KICK IT DOWN A GUTTER, OR DOUSE IT WITH WATER, YOU CAN MINIMIZE ITS IMPACT.
- STAY PEACEFUL. PEACEFUL PROTEST IS THE ONLY WAY TO BE TAKEN SERIOUSLY AND TO BE TRULY HEARD.

KNOW YOUR ENEMY

TEAR GAS IS A NON-LETHAL CHEMICAL WEAPON THAT STIMULATES THE CORNEAL NERVES IN THE EYES TO CAUSE TEARING, PAIN, AND EVEN BLINDNESS. TEAR GAS WORKS BY IRRITATING MUCOUS MEMBRANES IN THE EYES, NOSE, MOUTH AND LUNGS, AND CAUSES CRYING, SNEEZING, COUGHING, DIFFICULTY BREATHING, PAIN IN THE EYES, TEMPORARY BLINDNESS, ETC.

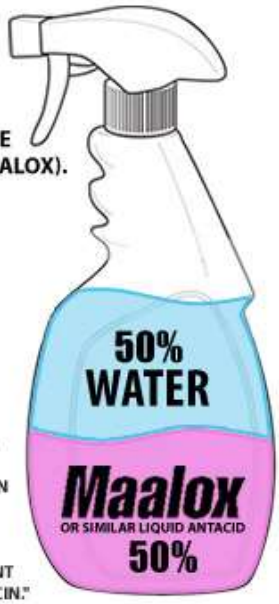
TEAR GAS RELIEF

Liquid Antacid and Water (LAW)

BE PREPARED FOR EXPOSURE. TEAR GAS IS A PARTICULATE, NOT REAL GAS, SO PAINTERS/DUST MASKS HELP.

"GREEKS HAVE BECOME SKILLED AT CHOOSING THE RIGHT PROTECTIVE GEAR. MAALOX IS A MUST."
ARIS MESSINIS/AFP

1) FIND A GOOD SIZE SPRAY BOTTLE AND WASH WELL.
2) FILL HALF OF SPRAY BOTTLE WITH LIQUID ANTACID (MAALOX).
3) FILL THE REMAINING HALF OF BOTTLE WITH WATER.
4) WHEN EXPOSED SPRAY YOUR EYES AND MOUTH, THEN SWALLOW.



ALSO EFFECTIVE AS PEPPER SPRAY REMEDY
A UNIVERSITY OF CALIFORNIA SAN FRANCISCO-BASED STUDY HAS FOUND THAT TOPICAL APPLICATION OF ANTACIDS " FOR CAPSAICIN-INDUCED PAIN IS EFFECTIVE, PARTICULARLY IN EARLY TREATMENT OF EXPOSURE TO REFINED CAPSAICIN."

deptofunitedwerise@hotmail.com

STAY VIGILANT. STAY UNITED. STAY INFORMED. PROTECT YOUR FELLOW COUNTRYMEN. DO NOT TRUST THE MEDIA.

SOURCES:
@JasonPicard
GLOBAL POST: http://www.globalpost.com/dispatches/news/regions/europe/protestor-chic-how-greeks-prepare-tear-gas
Wikia (Medic Wiki): http://medic.wikia.com/wiki/Pepper_spray_and_tear_gas
WIKIPEDIA: http://en.wikipedia.org/wiki/Tear_gas

FORM #067-INFO-990368-2A (rev. 10.27.11)
INFORMATION COURTESY OF: DEPT. "UNITED WE RISE" - INFORMATION BRANCH

Fig. 1.9: Defending Against Tear Gas

10. Shock

Shock is not a chief complaint, it is the result of numerous factors related to a patient's injury and condition. In essence, shock is a condition defined by cardiovascular compromise in which the patient is no longer pumping blood adequately. Shock can be deadly, and must be treated quickly.

S/S:

- May be awake, but disoriented
- Unconsciousness is possible
- Confusion
- Lack of awareness
- Sense of impending doom
- Restlessness, anxious
- Rapid, shallow breathing
- Rapid, weak pulse
- Pale, cool, and clammy skin
- Low blood pressure
- Nauseousness

Treatment:

1. Call 911
2. Check the ABCs
3. Control the patient's bleeding
4. Treat the underlying condition affecting the patient
5. Keep the patient warm and protect them from their environment

(Wildcare, 2014, p. 55)

11. Burns

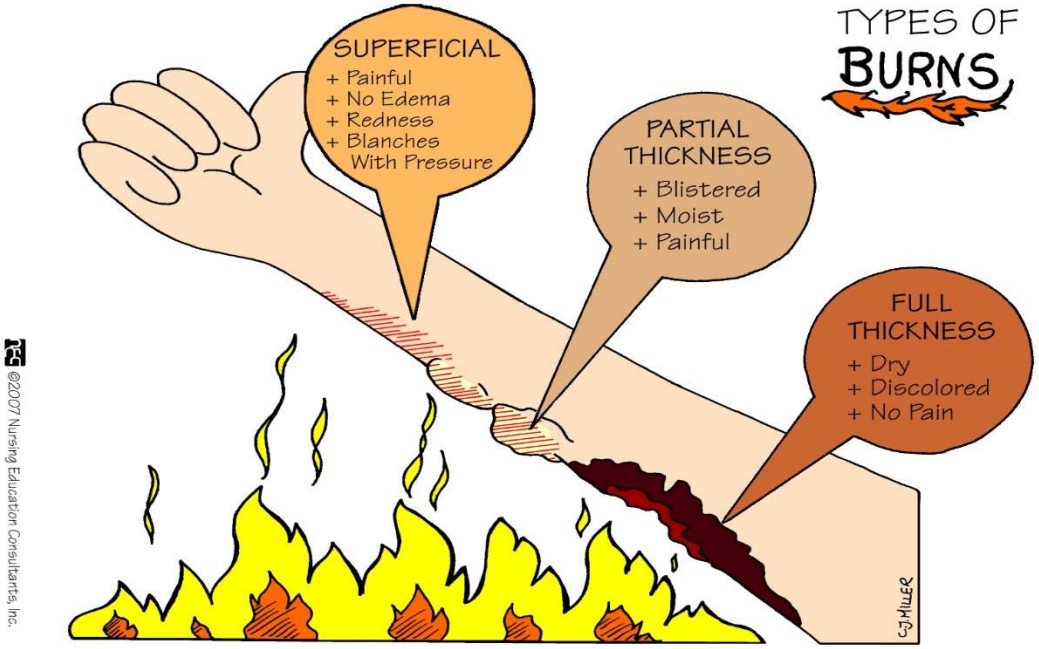


Fig. 1.10: Burn Staging (Nursing Education Consultants, 2007)

Burns may occur from electricity, radiation, thermal (fire, hot things, etc.), and chemical substances. Treatment of burns is dependent on stage and type.

Burn Staging:

Superficial (First Degree):

- Damage only to the skin's top layer
- Redness
- Mild pain
- Tender and warm to the touch
- Some itchiness

Partial Thickness (Second Degree):

- Damage is through the top layer of the skin into the upper layers of the middle skin layer (dermis)
- Redness
- Increased tenderness
- Blistering
- Extremely painful

Full Thickness (Third Degree):

- Burn extends through all skin layers
- Area may be charred and black
- There is little to no pain due to nerve destruction
- Little to no bleeding
- Surrounded by additional partial thickness burns

(Wildcare, 2014, p. 81)

Treatment of 1st degree burns:

1. Ensure scene safety
2. Rinse the burn in cool, running water for at least 5 minutes
3. Do not apply lotions or ointments, as these trap the heat
4. It's unlikely that the patient will need further medical treatment, however this is ultimately up to their decision

(Curtis, 2005, p. 315)

Treatment of 2nd to 3rd degree burns:

1. Ensure scene safety, call 911
2. Assess ABCs and level of consciousness.
    a. Thermal burns (especially people caught in fires) have the ability to char the respiratory system with superheated gases. Ensure adequate airway and breathing
    b. Electric burns may affect breathing
    c. Chemical burns may blister and damage the lungs and respiratory track
3. Remove or cut away clothing from the burn
    a. Remove jewelry, watches, footwear, and other obstructive clothing
4. Leave the blisters intact
5. Rinse the burn in cold water, do not apply ice
6. Dress the burn with moist, sterile dressings
7. Keep the patient hydrated
8. Keep the patient warm (this may seem paradoxical, however the patient is likely to go into shock after severe burns)
9. ***Remote Care Only***: Monitor for infection, which is likely during the long term treatment of burns in remote areas

(Wildcare, 2014, pp. 83-85)

12. Seizures

13. Soft Tissue Injuries

Lacerations

Blisters

Bibliography

Black Cross Health Collective. (n.d.). *An Activist's Guide to Basic First Aid*. Black Cross Health Collective. Retrieved January 20, 2021, from http://teargas.info/first-aid.pdf

Brouhard, R. (2019, November 22). Learn Important Steps to Properly Treat a Gunshot Wound Victim. Retrieved from https://www.verywellhealth.com/how-to-treat-a-gunshot-wound-1298915

Curtis, R. (2005). *The backpackers field manual: A comprehensive guide to mastering backcountry skills*. New York, NY: Three Rivers Press.

DeMuro, J. (2020, December 21). *How to Attend to a Stab Wound*. WikiHow. https://www.wikihow.com/Attend-to-a-Stab-Wound

Hubbell, F. (2014). *SOLO's Field Guide to Wilderness First Aid* (3rd ed.). TMC Books/Stonehearth Open Learning Opportunities.

Hubbell, F. (2014). *Wildcare: Working in less than desirable conditions and remote environments*. Conway, NH: TMC Books/Stonehearth Open Learning Opportunities.

McEvoy, D., Moore, G., & Bleicher, J. (2012). *Wilderness Medicine* (V. Moody, J. Blattner, D. Chenoweth, & R. Birkby, Eds.; 12th ed.). Aerie Backcountry Medicine.

New York State Department of Health Bureau of Emergency Medical Services. (n.d.). Suspected Spinal Injury. Retrieved from https://www.health.ny.gov/professionals/ems/

Saint John Ambulance Australia. (2020). *First aid fact sheet*. https://stjohn.org.au/assets/uploads/fact%20sheets/english/Fact%20sheets_concussion.pdf

The American Red Cross. (2019, July 09). Every Second Counts. Retrieved January 20, 2021, from https://redcross.softourniquet.com/